

## CLAIMS

1. A food product comprising a pasteurized hydrated, edible food item, said food product being at a temperature state of less than 10 ° C, wherein said stored food product comprises dormant, hydrated nontoxic microorganisms that are effectively dormant up to temperatures of about 10 ° C., and wherein, if the food product reaches a temperature above 10 ° C., said nontoxic microorganisms release by-products into said food product that inhibit the growth of harmful microorganisms.
2. The food product of claim 1 wherein the microorganisms, when no longer dormant, inhibit the growth of toxic microorganisms within the food product by producing an acid, thereby lowering the pH of the food product.
3. The food product of claim 1 wherein the microorganisms comprise a bacteria belonging to a genera selected from the group consisting of *Lactococcus*, *Streptococcus*, *Leuconostoc*, *Pediococcus*, *Lactobacillus*, *Bifidobacterium*, and *Propionibacterium*.
4. The food product of claim 1 wherein the microorganisms comprise a bacteria selected from the group consisting of *Pediococcus acidilactici*, *Lactobacillus bulgaricus*, *Lactobacillus plantarum*, *Lactobacillus acidophilus*, *Lactobacillus helveticus*, *Lactobacillus salivarius*, *Leuconostoc citrovorum*, *Streptococcus cremoris*, *Streptococcus diacetylactis*, and *Streptococcus lactis*.
5. The food product of claim 1 wherein the microorganisms comprise *Streptococcus thermophilus* bacteria.
6. The food product of claim 1 wherein the microorganisms, when no longer dormant, inhibit the growth of toxic microorganisms within the food product by producing one or more antibiotics.

7. The food product of claim 1 wherein the hydrated, edible food item comprises a liquid.
8. The food product of claim 1 wherein the hydrated, edible food item comprises a sauce.
9. The food product of claim 1 wherein the hydrated, edible food item comprises a filled dough product.
10. The food product of claim 1 wherein the food product after pasteurization is sealed within a container.
11. The food product of claim 1 wherein at least a portion of the microorganisms are encapsulated within an encapsulation material.
12. The food product of claim 11 wherein the encapsulation material comprises a food item.
13. The food product of claim 12 wherein the encapsulation material comprises a fat.
14. The food product of claim 11 wherein the encapsulation material comprises an edible polymer.
15. The food product of claim 11 wherein the encapsulation material forms a sachet.
16. The food item of claim 10 wherein the food product is stored in an anaerobic environment.
17. The food product of claim 1 wherein the edible food item comprises an egg roll.
18. The food product of claim 1 wherein the edible food item comprises filled ravioli.

19. The food product of claim 1 wherein the edible food item comprises juice.
20. The food product of claim 1 wherein the edible food item comprises a dairy product.
21. The food product of claim 2, wherein the food product has an initial pH above 5.4 and comprises nontoxic microorganisms that cause the food product to have a pH of 5.4 within 120 hours at an incubation temperature of 32.2° C.
22. The food product of claim 1 wherein the food product comprises greater than about  $10^4$  CFU/gm of the microorganisms.
23. The food product of claim 1 wherein the food product comprises from about  $10^6$  CFU/gm to about  $10^8$  CFU/gm of the microorganisms.
24. A method of preserving a food product comprising:
  - (a) pasteurizing the food product, and then
  - (b) applying a bacterial suspension comprising microorganisms thereto to form an inoculated food product; and
  - (c) storing said inoculated food product at a temperature at or below 10 ° C.;wherein after storage the microorganisms remain dormant up to temperatures of about 10 ° C., and if the inoculated food product reaches a temperature above 10 ° C., said microorganisms release by-products into said food product that inhibit the growth of harmful microorganisms.
25. The method of claim 24 wherein the microorganisms, when no longer dormant, inhibit the growth of toxic microorganisms within the food product by producing an acid, thereby lowering the pH of the food product.

26. The method of claim 24 wherein the microorganisms comprise a bacteria belonging to a genera selected from the group consisting of *Lactococcus*, *Streptococcus*, *Leuconostoc*, *Pediococcus*, *Lactobacillus*, *Bifidobacterium*, and *Propionibacterium*.
27. The method of claim 24 wherein the microorganisms comprise a bacteria selected from the group consisting of *Pediococcus acidilactici*, *Lactobacillus bulgaricus*, *Lactobacillus plantarum*, *Lactobacillus acidophilus*, *Lactobacillus helveticus*, *Lactobacillus salivarius*, *Leuconostoc citrovorum*, *Streptoccus cremoris*, *Streptococcus diacetylactis*, and *Streptococcus lactis*.
28. The method of claim 24 wherein the microorganisms comprise *Streptococcus thermophilus* bacteria.
29. The method of claim 24 wherein the microorganisms, when no longer dormant, inhibit the growth of toxic microorganisms within the food product by producing one or more antibiotics.
30. The method of claim 24 wherein the applying step comprises spraying a bacterial suspension comprising microorganisms onto the stuffed pasta product at a temperature less than about 50°F.